CLAIMS:

What is claimed is:

1. A method for testing or predicting whether a mammal will respond therapeutically to a method of treating cancer comprising administering an agent that modulates cdk activity, wherein the method comprises:

(a) measuring in the mammal the level of the nucleotide sequence of SEQ ID NO:1246;

(b) exposing the mammal to the agent that modulates cdk activity; and

(c) following the exposing of step (b), measuring in the mammal the level of the nucleotide sequence of SEQ ID NO:1246,

wherein a difference in the level of the nucleotide sequence of SEQ ID NO:1246 measured in step (c) compared to the level of the nucleotide sequence of SEQ ID NO:1246 measured in step (a) indicates that the mammal will respond therapeutically to said method of treating cancer.

2. The method of claim 1 wherein said agent is N-5-[[5-(1,1-Dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl-4-piperidinecarboxamide, 0.5-L-tartaric acid salt.

3. A method for determining whether a mammal is responding to an agent that modulates cdk activity, comprising:

(a) obtaining a biological sample from the mammal;

(b) measuring in said biological sample the level of the nucleotide sequence of SEQ ID NO:1246;

(c) correlating said level of the nucleotide sequence of SEQ ID NO:1246 with a baseline level; and

(d) determining whether the mammal is responding to an agent that modulates cdk activity based on said correlation.

4. The method of claim 3 wherein said agent is N-5-[[5-(1,1-Dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl-4-piperidinecarboxamide, 0.5-L-tartaric acid salt.

5. A method for testing or predicting whether a mammal will respond therapeutically to a method of treating cancer comprising administering an agent that modulates cdk activity, wherein the method comprises:

(a) measuring in the mammal the level of at least one biomarker selected from the biomarkers of Table 1;

(b) exposing the mammal to the agent that modulates cdk activity;

(c) following the exposing of step (b), measuring in the mammal the level of the at least one biomarker,

wherein a difference in the level of the at least one biomarker measured in step (c) compared to the level of the at least one biomarker measured in step (a) indicates that the mammal will respond therapeutically to said method of treating cancer.

6. The method of claim 5 wherein said agent is N-5-[[5-(1,1-Dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl-4-piperidinecarboxamide, 0.5-L-tartaric acid salt.

7. The method of claim 5 wherein the at least one biomarker is a protein.

8. The method of claim 5 wherein the at least one biomarker is an mRNA transcript.

9. A method for determining whether a mammal is responding to an agent that modulates cdk activity, comprising:

(a) obtaining a biological sample from the mammal;

(b) measuring in said biological sample the level of at least one biomarker selected from the biomarkers of Table 1;

(c) correlating said level of at least one biomarker with a baseline level; and

(d) determining whether the mammal is responding to an agent that modulates cdk activity based on said correlation.

10. A method for determining whether a mammal is responding to an agent that modulates cdk activity, comprising:

(a) exposing the mammal to the agent; and

(b) following the exposing of step (a), measuring in the mammal the level of at least one biomarker selected from the biomarkers of Table 1,

wherein a difference in the level of the at least one biomarker measured in step (b), compared to the level of the at least one biomarker in a mammal that has not been exposed to said agent, indicates that the mammal is responding to the agent that modulates cdk activity.